

Features of thermal processes of plasma deposition and hardening of coatings with external modulation parameters of the arc

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Abstract

In the work on the basis of mathematical modeling analysis of processes of plasma deposition of coatings with modulation of the electrical parameters of the extension arc. The effect of modulation on the temperature field in the system "coating-basis" on a local scale, proportionate to the diameter of the spot attachment of the arc to the surface, and at the macrolevel of evaporation surface. It justifies the preconditions of the improvement of plasma deposition and hardening coatings.

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